

## New species of *Stizocera* (Coleoptera: Cerambycidae) from Bolivia

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### Abstract

Two species of *Stizocera* (Coleoptera: Cerambycidae: Cerambycinae: Elaphidiini) are described from Buena Vista, Ichilo Province, Santa Cruz Department, Bolivia: *Stizocera delicata*, new species and *Stizocera ichilo*, new species. Comparison of diagnostic features with the similar species *Stizocera longicollis* Zajciw, *Stizocera rugicollis* Guérin-Ménéville, and *Stizocera nigroapicalis* Fuchs is presented.

**Key words:** Longhorned beetles, descriptions, Buena Vista, Cerambycidae, Bolivia, *Stizocera*, Elaphidiini, new species, Santa Cruz

### Introduction

Bolivia is an amazingly biodiverse country; extensive collecting near Buena Vista (Ichilo Province, Santa Cruz Department) in an area smaller than Manhattan Island, has produced over 700 species of Cerambycidae. No efforts have been made for canopy fogging or extensive Malaise trapping, so clearly the absolute number of Cerambycidae at this one site is undoubtedly higher. The longhorned beetle fauna of Bolivia is complex. Perhaps the most dominant element is the Amazonian fauna, which is widespread throughout northern Brazil and lowland Bolivia, however Bolivia possesses southern temperate and Peruvian faunal elements as well. Several widespread species that occur as far north as Mexico and Central America are also represented in Bolivia (Monné and Giesbert 1993; Hovore and Monné 2003). This paper is among the first to document the biodiversity discovered by the efforts of many individuals over the past five years, especially at the “Flora and Fauna Hotel” site southeast of Buena Vista.

The genus *Stizocera* Audinet-Serville (1834) was first reviewed by Zajciw (1967) and subsequently by Martins & Napp (1983). The number of species increased when Lin-

gafelter (1998) synonymized *Nesostizocera* with *Stizocera*. The genus *Stizocera* as now recognized contains 45 known species and occurs in North, Central, and South America and the Caribbean (Hovore and Monné, 2003).

## Materials

The collections of many institutions and individuals were consulted during preparation of this paper. For brevity, acronyms are used throughout the paper and are defined here:

EFGC — Edmund Giesbert Collection, Gainesville (at FSCA), Florida.

FSCA — Florida State Collection of Arthropods, Gainesville, Florida.

IRD — Institute de Recherche pour le Développement.

JEWC — James Wappes Collection, Bulverde, Texas.

MNHN — Muséum National d'Histoire Naturelle, Paris, France.

NKMC — Noel Kempff Museum Collection, Santa Cruz, Bolivia.

RFMC — Roy Morris Collection, Lakeland, Florida.

SEL-USDA — Systematic Entomology Laboratory, U. S. Department of Agriculture.

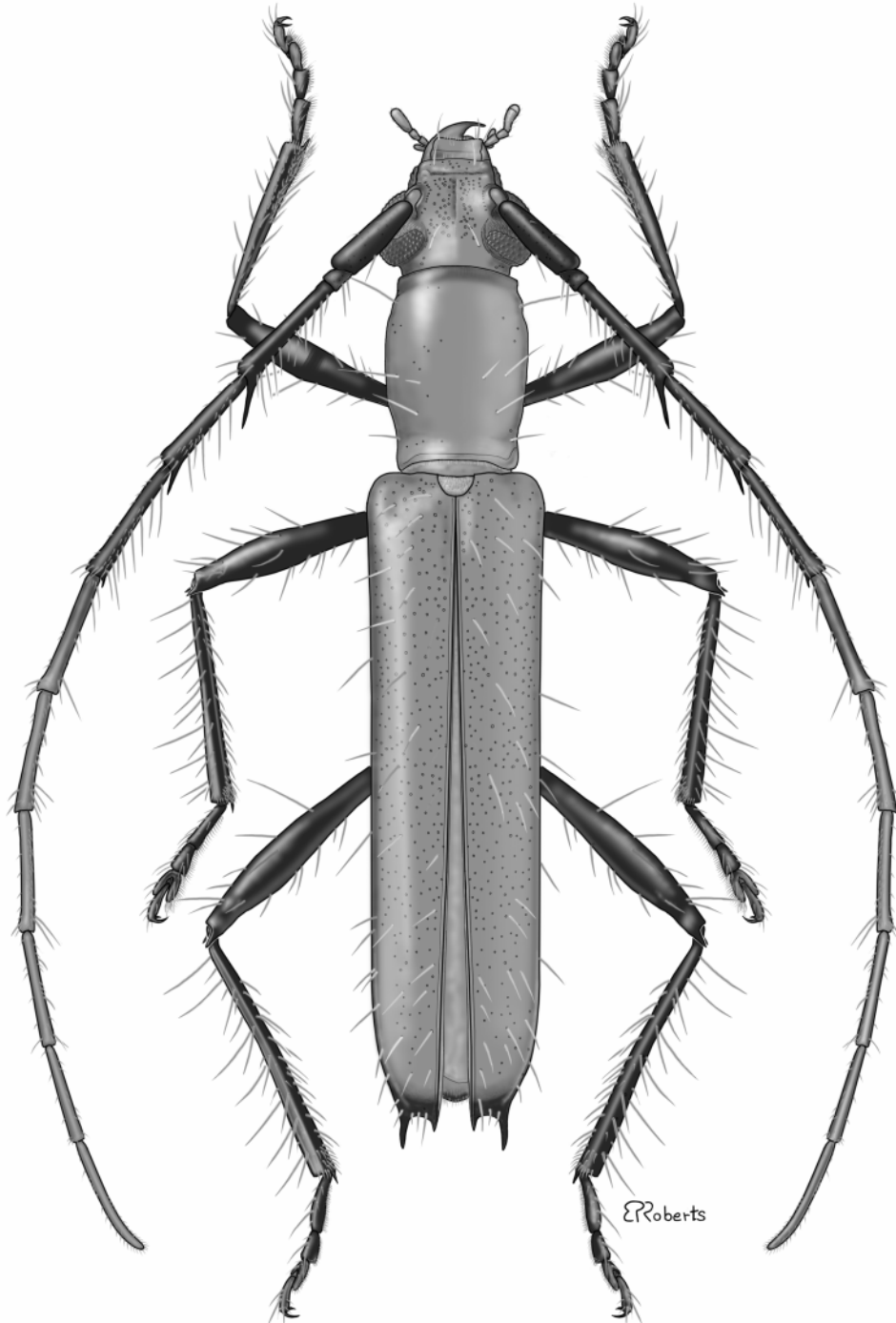
USNM — National Museum of Natural History, Smithsonian Institution, Washington, D.C.

## *Stizocera delicata* Lingafelter, new species

Figs. 1, 2a–c

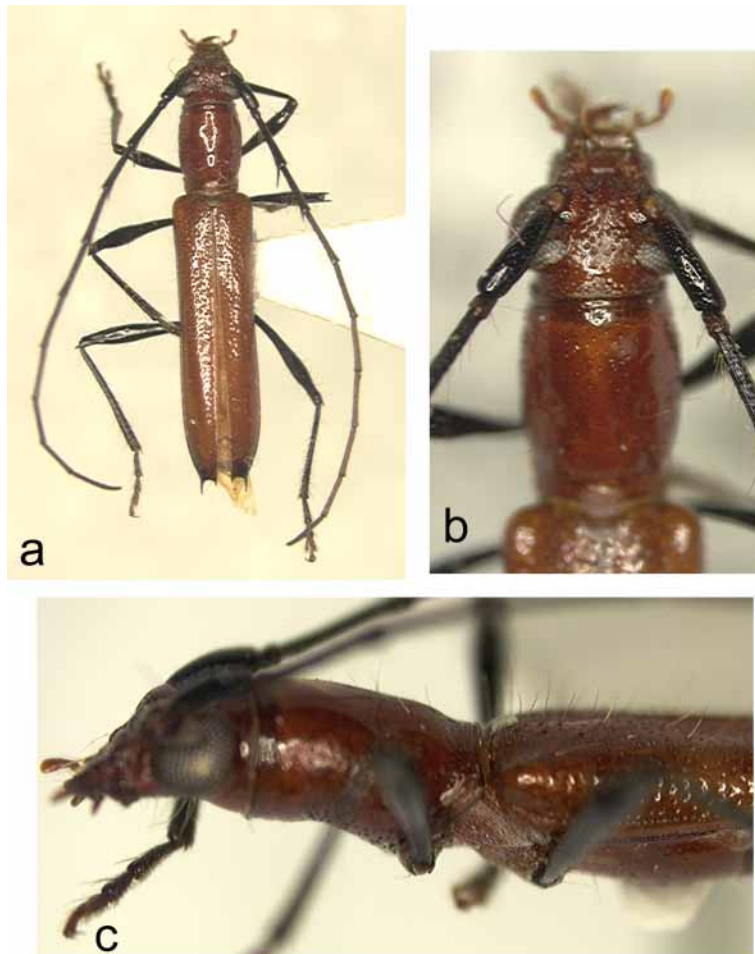
**Description.** Medium size, 7–11 mm long; 1.2–1.6 mm wide at humeri; integument color red-orange, except for extreme apex of elytra which fades into black, and entirely black legs and antennae. Head with shallow interantennal tubercle region, tubercles only slightly raised; coarsely, confluent punctate at anterior margin of tubercles and throughout frons, more sparsely punctate on vertex and occiput. Head glabrous except for one long hair on medial margin of upper eye lobe, and a few long hairs along frontal-clypeal margin. Antenna with vestiture of short translucent hairs and sparse, long, translucent hairs, more numerous on basal six segments, restricted to apices of segments 7–9, absent on segments 10–11. Antenna extending beyond apex of elytron by about two antennomeres in male. Antennomeres 3–5 strongly spined mesally, with spine of third segment quite long, nearly one half length of segment four. Last antennomere about 1.25 times length of penultimate antennomere in male. Scape and antennomere four slightly shorter than remaining antennomeres which are all subequal (except for longer segment 11 in male). Pronotum cylindrical, about 1.5 times as long as wide, strongly constricted posteriorly, less so anteriorly. No calli present; nearly glabrous except for a few scattered, long hairs. Pronotal disk with a few indistinct, widely spaced, shallow punctures, more abundant at sides and becoming dense on prothorax venter at posterior two-thirds. Prosternal process notched and expanded apically, procoxae each remain open posteriorly by nearly

its width. Elytron glabrous except for scattered long, erect, translucent hairs. Punctuation moderate in density and depth, gradually becoming shallower and indistinct toward apex. Elytral apex strongly bispinose, apicolateral spine 2–3 times longer than sutural spine.



**FIGURE 1.** *Stizocera delicata* Lingafelter, new species, male.

Scutellum broadly rounded, covered with dense, velvety white pubescence. Legs relatively long, slender, hind femur extending to about apical one-fifth of elytron. Profemur clavate, apices rounded; meso and metafemur slender, gradually enlarged apically, bispinose at mesal and lateral apices. Venter of meso- and metathorax with partial vestiture of short, velvety, white hairs (but these are not very noticeable), otherwise glabrous. Abdominal venter glabrous. Fifth ventrite of male broadly rounded apically.



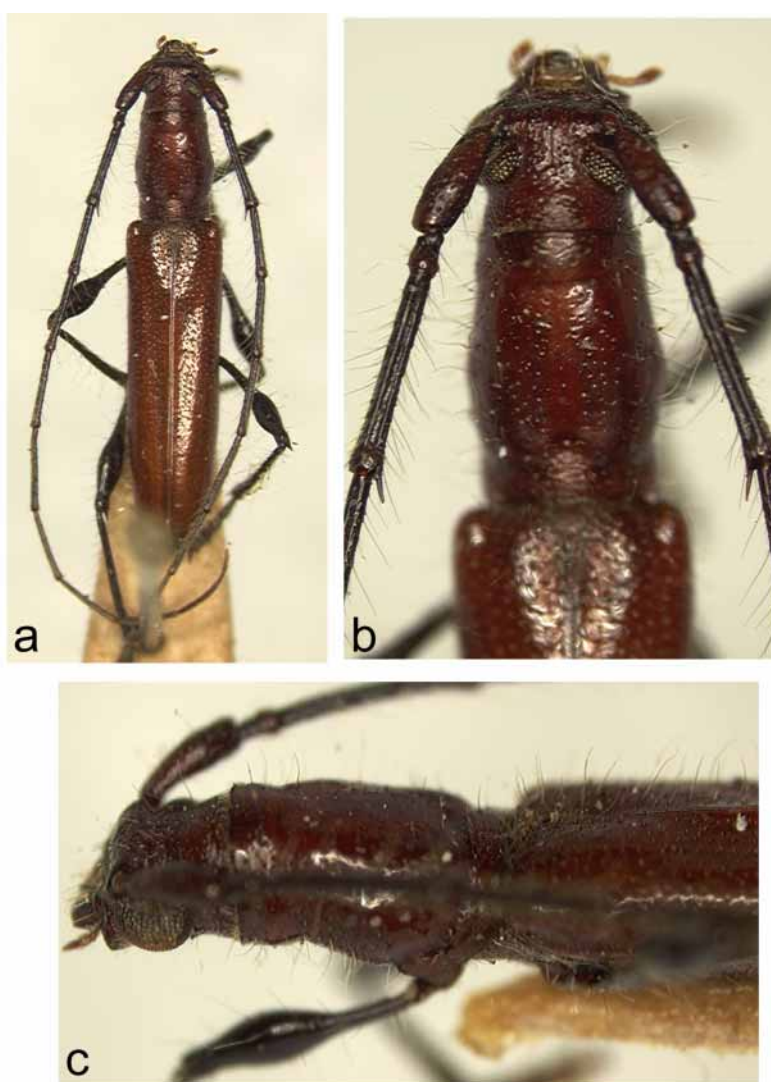
**FIGURE 2.** *Stizocera delicata* Lingafelter, new species, holotype. a, dorsal view; b, closeup of head and pronotum; c, lateral view of pronotum and base of elytron.

**Discussion.** Specimens of *S. delicata* are recognized by their delicate proportions, size, and color. *Stizocera longicollis* Zajciw (1963) (Fig. 3a–c) is most similar, but specimens of this species are recognized by their dense coating of long hairs on the legs, elytra, antennae, and pronotum, their densely punctate pronotal disk with a median callus, and their distinctly clavate meso- and metafemora. All these characters are lacking in specimens of *S. delicata*. There is a resemblance between *S. delicata* and small species of *Psyr-*

*assa*, which is primarily a North and Central American genus. However, the bispinose meso- and metafemoral apices, which are unspined in *Psyrassa*, distinguish the two genera.

**Etymology.** The specific epithet is a Latin adjective referring to the delicate facies.

**Types.** Holotype, male, BOLIVIA: Santa Cruz Dept., Ichilo Prov., Hotel Flora y Fauna, 4–6 km SSE Buena Vista, 17°29.95'S, 63°33.15'W, 400–500m; 3–14 November 2003, N. E. Woodley, cabin lights (NKMC). Paratypes (3): data same as holotype except: 21–25 November 2003, Morris, Nearn, Wappes (1 male, RFMC); data same as holotype except: 14–19 October 2003, Robin Clarke, L19-127 (1 male, JEW); data same as holotype except: S. W. Lingafelter, beating (1 male, USNM).



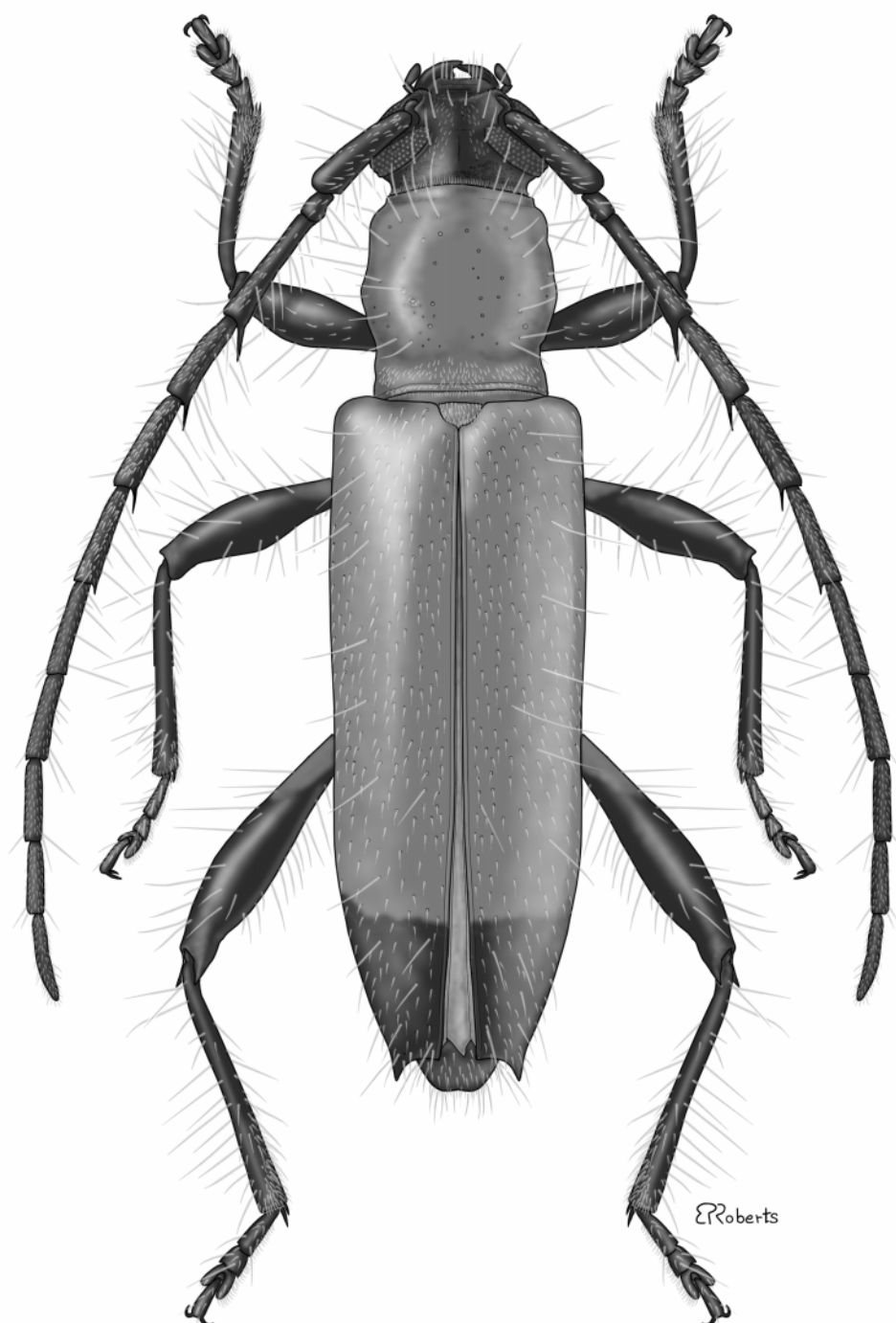
**FIGURE 3.** *Stizocera longicollis* Zajciw. a, dorsal view; b, closeup of head and pronotum; c, lateral view of pronotum and base of elytron.

*Stizocera ichilo* Lingafelter, new species

Figs. 4, 5a–c

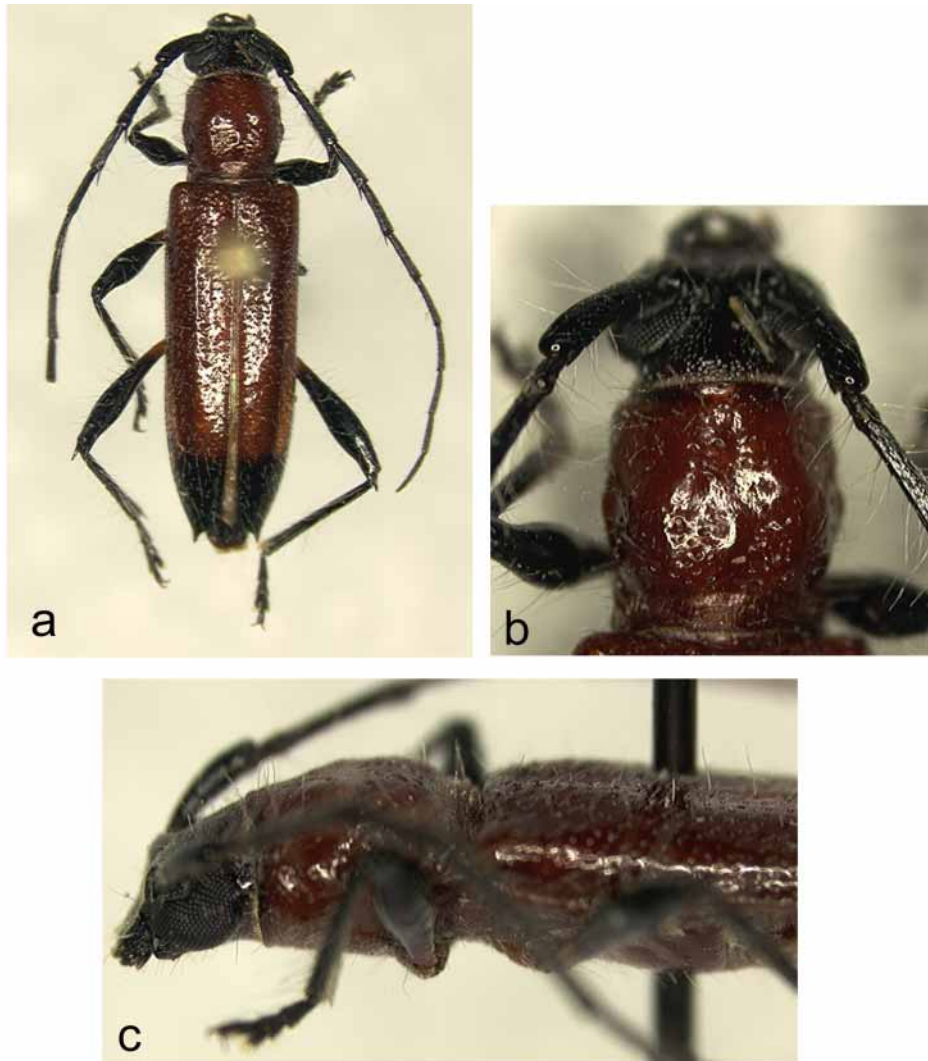
**Description.** Medium size, 7–12 mm long, 2.0–2.5 mm wide at humeri; integument color red-orange, except for apical one-fourth or less of elytra which are abruptly black, entirely black legs, antennae, head, and all ventrites except the first. Head with very shallow inter-antennal tubercle region, tubercles barely raised; very fine punctures around occiput in male, not apparent in female. Head with vestiture of very fine, short, translucent or white hairs around antennal tubercles and vertex. Sparse, scattered long translucent hairs around eye margin, vertex, frons, and frontal-clypeal margin. Antenna with vestiture of short translucent hairs and sparse, long, translucent hairs. Antenna of male and female comparable in length, extending to elytral apices or exceeding them by about one antennomere. Antennomeres 3–5 moderately spined mesally, with spine of third segment longest. Last antennomere about 1.25 times length of penultimate antennomere in both sexes. Third antennomere longest, subsequent antennomeres gradually reduced in length to tenth. Pronotum broad, strongly constricted posteriorly (with constriction extending anteriorly a little at middle of posterior region), less so anteriorly; about as wide as long in male, 0.8 times as wide as long in female. Pronotum covered with scattered, long hairs. Sexual dimorphism present in the punctation and shape of the prothorax. Males have a broader, more evenly rounded pronotum laterally, while females have several lateral indentations giving the pronotum an uneven appearance from above. In males, there are defined patches of punctation extending from sides onto anterior sides of disk, but not at center. In females, there are no (or only a few) punctures present on pronotum and no patches. In both sexes there is weak rugosity of the pronotal disk, especially at the posterior portion, but this is stronger in females than males. Prosternal process not notched and weakly expanded apically; procoxae each remain open posteriorly by 1.5 times width of prosternal process. Elytron covered with scattered long, erect, translucent hairs, and regularly distributed, but less abundant, extremely long hairs of at least twice their length. Punctation moderate in density and depth, gradually becoming shallower and indistinct toward apex. Elytral apex with apicolateral spine strongly produced, but sutural angle dentiform or angulate. Scutellum broadly rounded, covered with inconspicuous, translucent pubescence. Legs stout, of average length, hind femur extending to about apical one-fourth of elytron. Femora clavate; profemoral apices rounded; mesofemoral apices spinose mesally only; metafemoral apices bispinose at mesal and lateral apices. Venter of thorax and abdomen with partial vestiture of short, velvety, white hairs, and scattered longer hairs. Fifth ventrite of male truncate, of female broadly rounded apically.

**Discussion.** In coloration and rugosity of the pronotum, specimens of *S. ichilo* are very similar to those of *S. rugicollis* Guérin-Méneville (1844) (Figs. 6a–c, 7b) and *S. nigroapicalis* Fuchs (1961) (Fig. 7a). The pale legs and antennae of *S. nigroapicalis* distinguish it immediately from *S. ichilo*. Specimens of *S. rugicollis* are easily distinguished by their black pronotum (red in *S. ichilo*) and elytra having black markings occupying at least apical one-third (black at apical one fourth or less in *S. ichilo*).



**FIGURE 4.** *Stizocera ichilo* Lingafelter, new species, female.





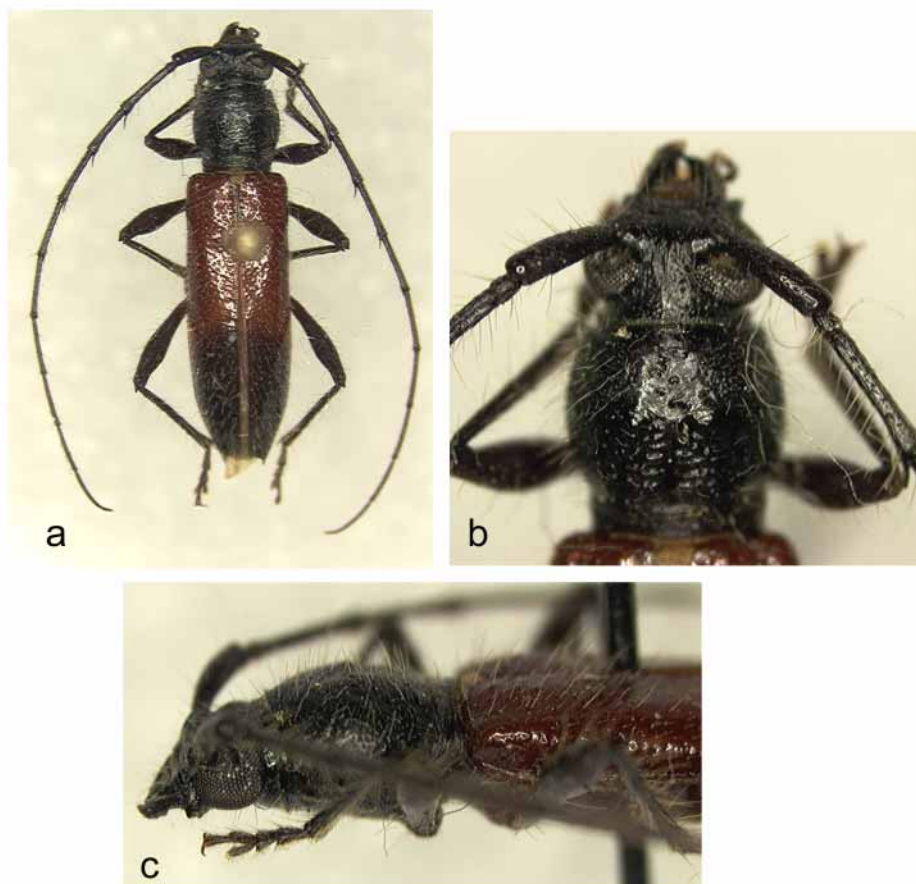
**FIGURE 5.** *Stizocera ichilo* Lingafelter, new species, holotype. a, dorsal view; b, closeup of head and pronotum; c, lateral view of pronotum and base of elytron.

**Etymology.** The specific epithet, ichilo, is taken from the name of the Bolivian province where the species was first collected. It is a noun in apposition.

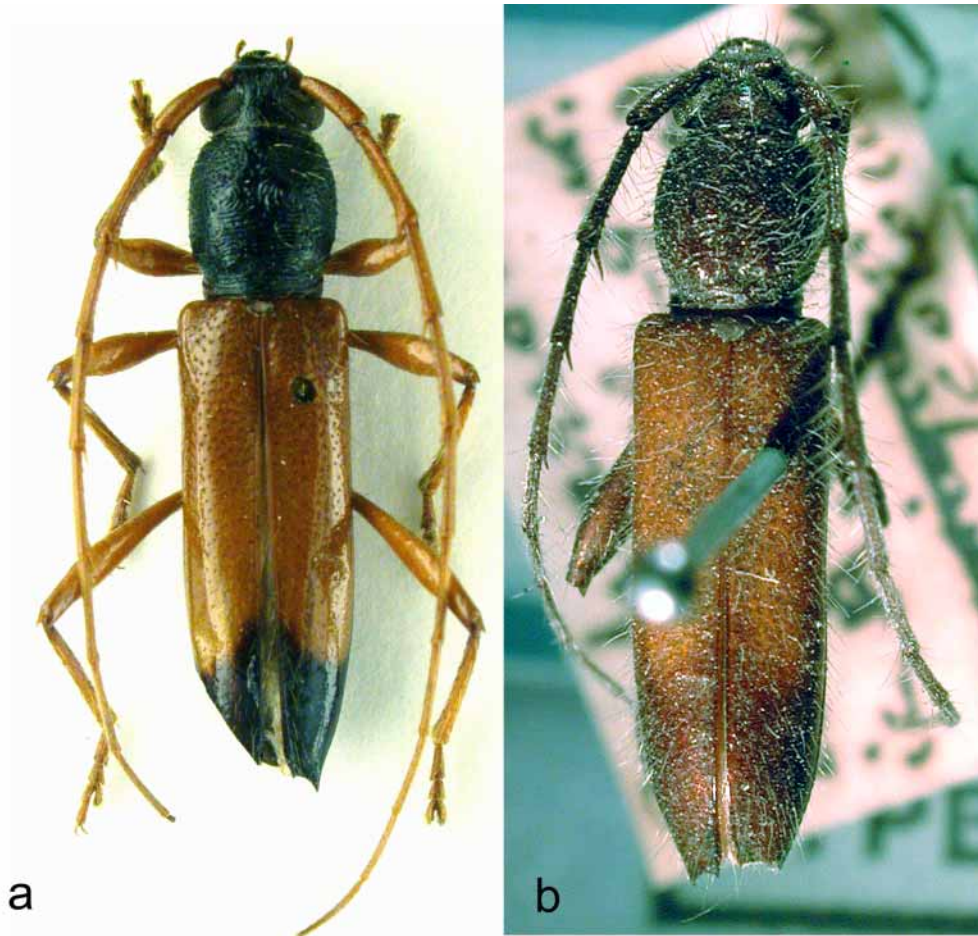
**Types.** Holotype, female, BOLIVIA: Santa Cruz Dept., Ichilo Prov., Hotel Flora y Fauna, 4–6 km SSE Buena Vista, 17°29.95'S, 63°33.15'W, 400–500m, 3–14 November 2003, S. W. Lingafelter, blacklight (NKMC). Paratypes (9): data same as holotype except: 2–14 October 2003, Robin Clarke, L18-34 (2 females, NKMC, JEW); data same as holotype except: 14–17 November 2003, Morris, Nearn, Wappes (1 male, RFMC); data same as holotype except: 18–25 October 1992, E. Giesbert (2 males, EFGC); data



same as holotype except: 1–10 November 2002, S. W. Lingafelter, UV-MV light (1 male, 1 female, USNM); data same as holotype except: 5–15 November, 2001, M. C. Thomas, B. K. Dozier, blacklight trap, tropical transition forest (1 female, FSCA); data same as holotype except: 14–19 October 2000, M. C. Thomas, tropical transition forest (1 male, FSCA).



**FIGURE 6.** *Stizocera rugicollis* Guérin-Méneville. a, dorsal view; b, closeup of head and pronotum; c, lateral view of pronotum and base of elytron.



**FIGURE 7.** a, *Stizocera nigroapicalis* Fuchs, holotype; b, *Stizocera rugicollis* Guérin-Ménéville, holotype.

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